

REMARKS/ARGUMENTS

Claims 18-29 and 31 are pending. Independent Claim 18 is directed to a method in which washing the solid component is performed using an aliphatic or alicyclic hydrocarbon. Dependent Claims 19-29 and 31 depend from Claim 18.

Rejection—35 U.S.C. §103

Claims 10, 11, 13-16, 18, 19, 21-24, 26 and 27 were rejected under 35 U.S.C. 103(a) as being anticipated by Nagaoka et al., EP 093068, in view of Takagawa et al., U.S. Patent No. 6,072,098. The rejection of claims 10, 11, and 13-16 is moot in view of the cancellation of these claims.

The process of independent claim 18 requires that washing is performed at least twice and that part of the entirety of a mother liquor obtained in the second or subsequent washing is used as a solvent in a washing performed prior to the washing in which the mother liquor is obtained. By use of these particular washing steps and washing solvents, a high yield of 2,6-DMN is obtained, because the mother liquor obtained in the second washing is saturated with 2,6-DMN and no longer dissolves 2,6-DMN. However, the mother liquor has a large potential to dissolve 2,7-DMN, see the second paragraph of page 13 of the specification. This preferential purification characteristic depends on the washing solvent being an aliphatic and/or alicyclic hydrocarbon.

Nagaoka does not disclose or suggest a process for making 2,6-dimethylnaphthalene (2,6-DMN) by washing the solid component using a solvent which is an aliphatic or alicyclic hydrocarbon. Step 2(b), the rinsing step, in the process of Nagaoka preferably involves aromatic solvents such as benzene, toluene and xylene (see page 7, line 48). Practical Examples 1-3 on page 8 of Nagaoka use either ethyl alcohol or benzene as solvents. Thus,

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there is no suggestion in Nagaoka that the washing sequence of the present invention would provide any benefit, nor any reasonable expectation of success that such a washing sequence would retain 2,6-DMN, while removing 2,7-DMN.

Takagawa discloses aliphatic and alicyclic hydrocarbon solvents, but does not disclose any washing sequence. Therefore, Takagawa cannot suggest the washing sequence of the present invention, nor provide a reasonable expectation of success for purifying 2,6-DMN using an aliphatic or alicyclic hydrocarbon within such a washing sequence. Accordingly, the Applicants respectfully request that this rejection be withdrawn.

Rejection—35 U.S.C. §103

Claims 14, 18, 19 and 21-24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nagaoka et al., EP 093068, in view of Takagawa et al., U.S. Patent No. 6,072,098 and Kobe et al., JP-5331079.

Nagaoka and Takagawa have been discussed above and do not disclose or suggest the washing sequence of the present invention. Kobe et al. does not suggest this washing sequence either. Kobe was cited for its disclosure of a press-filtration step at 50 atm or higher, but does not disclose or suggest washing using an aliphatic or alicyclic hydrocarbon. Accordingly, the cited art does not render the present invention obvious.

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CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

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Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Thomas Cunningham", with a stylized flourish at the end.

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